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Treatment of Suppuration
of the middle ear



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TREATMENT OF SUPPURATION OF THE MIDDLE EAR.

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The majority of acute inflammations of the middle ear are seen first by the general practitioner. Especially is this so in country practice. Occurring, as they do, from exanthematosus diseases, colds and teething, it is he who can be of the greatest service in preventing permanent impairment of hearing, which is most likely to occur if such diseases are neglected at this stage; while their dangers will be largely averted if they are properly treated. With these facts before us, a few suggestions as to how diseases of the ear can best be treated by those who have not had the advantages of a clinical experience may be of service.

The first symptom of inflammation of the middle ear is pain, which should be relieved by blood letting, with leeches (Swedish), two to four in number, applied over the tragus, or by the use of the artificial leech over the same region. Should it be desired to withdraw more blood, the flow can be kept up by the use of hot flaxseed poultices, applied over the parts. In infants and in very old persons it is best to rely entirely on moist heat, which can be applied by wring-



ing flannel out of boiling water and applying it over the ear, or by the use of flaxseed poultices, which should be made large and thick and placed over the ear as hot as can be borne, care being taken to place a cotton pad behind the auricle in order to prevent its being pressed backward, which would greatly increase the pain. Over the poultice should be placed oiled silk—or, in its absence, paper—and a bandage or handkerchief to hold it in position. The poultice should be replaced by a hot one as often as it cools, and this should be continued until all acute pain subsides. At this stage the inflammation may subside. If it does, the use of moist heat should be discontinued, and dry heat may then be used. This is best accomplished by applying large pads of absorbent cotton over the ear and continuing their use until all tenderness over the tragus or mastoid regions subside.

In the majority of cases of this sort the inflammation goes on to a higher stage, namely, that of pus formation. Then the membrane ruptures spontaneously, if it is not opened by paracentesis; and a free discharge of pus follows. The acute pain at this stage usually subsides. Here, as in the above condition, the use of moist heat should be discontinued and cotton pads should be substituted. In addition to this the canal should be thoroughly cleansed, either by the use of an ear syringe and warm water; or, in its absence, the same result can be accomplished by the use of a sponge shaved to a point at one end. The head should be placed in a horizontal position and warm water allowed to flow from the

sponge into the canal, which can be dried by inserting the pointed end of the syringe or of the sponge in the canal. The canal should be straightened during the cleansing by drawing the auricle outward and slightly backward. The patient should several times during the cleansing of the canal inflate the ear by the Valsalva's method, which consists in closing the mouth, holding the nostrils with the fingers and by a forced expiratory effort forcing air through the Eustachian tube into the middle ear cavity. In this way the pus which remains in the middle ear cavity is forced through the perforated membrane into the external canal and may be removed during the cleansing. After thorough cleansing, a cotton plug, $1\frac{1}{4}$ inches in length if the patient be an adult, and 1 inch long if a child, can be made by loosely twisting absorbent cotton round a match of proper size for the canal. The plug may be inserted into the auditory canal and it will act as a protector from the air and as a drain, and should be removed as often as it becomes saturated with pus. After each cleansing, which should be done once daily, the cotton pad should be again applied. This method of treatment should be continued until all tenderness over the regions described has subsided, after which time insufflations of finely-powdered boric acid, or—what I much prefer—equal parts of iodoform and boric acid, should be blown into the canal, either through an instrument made for the purpose (an insufflator), or, in its absence, through a quill of sufficient size to fit the canal.

As inflammations of the middle ear are

generally the result of an extension of inflammation from the naso-pharynx, treatment of these surfaces should be instituted from the onset of the attack. The nose and throat should be thoroughly cleansed with an alkaline solution such as Dobell's solution, or:

R	Listerine	fʒi
	Glycerini	fʒ iii
	Sodii bicarb.	
	Sodii biborat.	aa ʒjss
	Aquaæ q. s. ad.	fʒ iv

M. Sig. fʒi in fʒii warm water snuffed up the nose, and as a gargle for the throat three times daily.

The latter I have found very useful in removing the muco-purulent discharge from the naso-pharynx. If in a child, it can be used by injecting it through the nasal canthus with a syringe. After thorough cleansing with the solution, the throat should be gargled with some good astringent, such as:

R	Acid. tannici	ʒ iii
	Pulv. aluminis	ʒ ii
	Potass. chloratis	ʒ i
	Glycerini	fʒi
	Aquaæ q. s.	ad. fʒ iii

M. Sig. fʒi in fʒii warm water as a gargle, t.d.

If the patient be a small child, small quantities of chlorate of potash, mixed with sugar, can be placed in the mouth and allowed to dissolve. The patient's general condition is usually below par, and this state should be met with stimulants and tonics, such as milk punch, beef tea, tr. ferri chloridi and cod-liver oil. The patient at the same time should be kept in the house, and if possible in bed.

